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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/982,073	10/17/2001	Robert A. Aekins	695695.0086	8240

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EXAMINER

HAMMOND, BRIGGITTE R

ART UNIT PAPER NUMBER

2833

DATE MAILED: 08/11/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/982,073

Applicant(s)

AEKINS ET AL.

Examiner

Brigitte R. Hammond

Art Unit

2833

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on 16 April 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-52 is/are pending in the application.
- 4a) Of the above claim(s) 15-20 is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-14 and 21-33 is/are allowed.
- 6) ☒ Claim(s) 34-38, 40-45 and 47-52 is/are rejected.
- 7) ☒ Claim(s) 39 and 46 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 12/18/03
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 34-38, 40 and 41 are rejected under 35 U.S.C. 103 (a) as being anticipated by Caveney 6,183,306. Caveney discloses an insert, comprising a dielectric support member 14, a plurality of pairs of electrically conductive elongated members 16 supported by the dielectric support member, each elongated member having a front end portion (see attachment of fig. 1) and a rear end portion 15, the front end portion including a contact portion to be exposed in the receiving space for making electrical contact with a media plug contact, the contact portion being disposed between the rear end portion and a front of the front end portion, the front end portion further including a curved portion that is disposed forward of the contact portion, and defines a shape, the rear end portion including a portion for connecting to the elongated member, wherein said shape defined by said curved portion of said one elongated member is substantially symmetrical to the shape defined by the curved portion of another of the elongated members not positioned adjacent to said curved portion of said one elongated member. Caveney does not disclose, the shape defined by the curved portion of one of the elongated members being substantially "asymmetrical" to the shape defined by the curved portion of another of the elongated members positioned

adjacent to said curved portion of said one elongated member. However, Vaden 5,911,602 discloses elongated members having alternating asymmetrical/symmetrical shapes of the curved portions, (see cover page). It would have been obvious to one of ordinary skill to modify the shape of the curved portions of Caveney by making them substantially "asymmetrical" to the shape defined by the curved portion of another of the elongated members positioned adjacent to said curved portion of said one elongated member as taught by Vaden to enhance signal transmission.

Regarding claims 35 and 36, the curved portions of Caveney and Vaden are shaped concave with respect to an upper surface of the support member.

Regarding claims 40 and 41, Caveney discloses a modular housing 12 having a data signal transmission media plug receiving space that could receive a RJ45 plug.

Regarding claims 37, 38, 44 and 45, Caveney and Vaden discloses the invention substantially as claimed except for the curved portion of one elongated member having a portion separated from the curved portion of another one of the elongated members positioned adjacent to the curved portion of the other elongated member by a distance that is greater than two or three time the thickness of one of the elongated members. This is an obvious modification since applicants have presented no explanation that this particular distance is significant or is anything more than one of numerous distances a person of ordinary skill in the art would find obvious for the purpose of reducing cross talk.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 42,43 and 47-52 are rejected under 35 U.S.C. 102(b) as being anticipated by Caveney. Caveney discloses an insert comprising a dielectric support member 14, a plurality of pairs of electrically conductive elongated members 16 supported by the dielectric support member, each elongated member having a front end portion (see attachment of fig. 1) and a rear end portion 15, the front end portion including a contact portion to be exposed in the receiving space for making electrical contact with a media plug contact, the contact portion being disposed between the rear end portion and a front of the front end portion, the front end portion further including bent 40,48 portions disposed forward of the contact portion, the rear end portion including a portion for connecting to the elongated member, wherein the bent portion of one of the elongated members is concave 40 with respect to an upper surface of the support member and the other is convex 48 with respect to an upper surface of the support member.

Regarding claim 43, the curved portions of Caveney are shaped concave with respect to an upper surface of the support member.

Regarding claims 47 and 48, Caveney discloses a modular housing 12 having a data signal transmission media plug receiving space that could receive a RJ45 plug (not shown).

Regarding claims 49 and 50, Caveney discloses an insert comprising a dielectric support member 14, a plurality of pairs of electrically conductive elongated members 16 supported by the dielectric support member, each elongated member having a front end portion (see attachment of fig. 1) and a rear end portion 15, the front end portion including a contact portion to be exposed in the receiving space for making electrical contact with a media plug contact, the contact portion being disposed between the rear end portion and a front of the front end portion, the front end portion further including a second portion 40,48 disposed forward of the contact of the contact portion, the rear end portion including a portion 15 for connecting to the elongated member, wherein the second portion 40 of one of the elongated members has a portion separated from the second portion 48 of another one of the elongated members positioned adjacent to said second portion of said one elongated member by a distance that is greater than thrice the thickness of one of the elongated members (see figs. 2 and 3).

Regarding claims 51 and 52, Caveney discloses a modular housing 12 having a data signal transmission media plug receiving space that could receive a RJ45 plug.

Allowable Subject Matter

Claims 1-14 and 21-33 are allowed.

Claims 39 and 46 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter: regarding claims 1, 9 and 26, patentability resides, at least in part in the insert

having a plurality of pairs of elongated members being disposed in positional relationships with respect to each other such that a capacitance is formed between the second portion of one of the elongated members and the second portion of another of the elongated members not positioned adjacent to the second portion of the one elongated members for reducing electrical noise during transmission of a signal, in combination with the other limitations of the base claims, and regarding claims 39 and 46, patentability resides, at least in part in a reactance being formed between the rear portion of one elongated member and the rear portion of another elongated member not positioned adjacent to the bent portion of said one elongated member, in combination with the other limitations of the base claims.

Response to Arguments

Applicant's arguments with respect to the claims have been considered but are moot in view of the new grounds of rejection.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Guilbert 5,350,3234 was cited for reactance in twisted pairs.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within

TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brigitte R. Hammond whose telephone number is 571-272-2006. The examiner can normally be reached on Mon.-Thurs. and Alternate Fridays from 7:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paula A Bradley can be reached on 571-272-2800 ext. 33. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Brigitte R. Hammond

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TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

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